

CLAIMS

1. Apparatus for producing an output voltage to power an electronic device, the apparatus comprising

5 a power supply comprising two or more first connection elements in which some or all of the first connection elements are in series with different respective resistive loads and circuitry for maintaining the first connection elements at different voltages; and

10 a connector assembly arranged to be coupled between the power supply and the electronic device,

the connector assembly having at least two second connection elements for connection to respective ones of the first connection elements and electrically connectable to the electronic device, the connector assembly further having selection means for modifying the voltage difference
15 between the first connection elements to which the second connection elements are connected, whereby the connector assembly draws a selected voltage from the power supply and passes the selected voltage to the electronic device.

- 20 2. Apparatus according to claim 1, wherein there are more than two first connection elements and the selection means includes one or more auxiliary connection elements which are connectable to selected ones of the first connection elements to vary the voltage difference between the first connection elements to which the second connection elements are
25 attached.

3. Apparatus according to claim 2, wherein the auxiliary elements are electrically connected to each other.
- 5 4. Apparatus according to any one of the preceding claims, wherein sides of the resistive loads away from the first connection elements are ~~mutually~~ ^{to} connected to a point in a voltage divider circuit.
- 10 5. Apparatus according to claim 4 when dependent on claim 3, wherein upon connection of the auxiliary connection elements to selected ones of the first connection elements, the voltage at said point in the voltage divider is held substantially constant and the voltage difference is varied between the first connection elements to which the second connection elements are attached.
- 15 6. Apparatus according to any one of the preceding claims, wherein the second connection elements are electrically connectable to the electronic device via an electric cable. ^{to}
- 20 7. A power supply comprising two or more first connection elements in which some or all of the first connection elements are in series with different respective resistive loads and circuitry for maintaining the first connection elements at different voltages, the power supply being arranged to be coupled to a connector assembly having at least two
25 second connection elements for connection to respective ones of the first

connection elements of the power supply and electrically connectable to an electronic device, the connector assembly further having selection means for modifying the voltage difference between the first connection elements to which the second connection elements are connected, whereby the connector assembly draws a selected voltage from the power supply and passes the selected voltage to the electronic device.

8. A power supply according to claim 7, wherein there are more than two first connection elements and the selection means of the connector assembly includes one or more auxiliary connection elements which are connectable to selected ones of the first connection elements to vary the voltage difference between the first connection elements to which the second connection elements are attached.

9. A power supply according to claim 7 or claim 8, wherein the sides of the resistive loads away from the first connection elements are mutually connected to a point in a voltage divider circuit.

10. A power supply according to claim 9, wherein upon connection of the auxiliary connection elements to selected ones of the first connection elements, the voltage at said point in the voltage divider is held substantially constant and the voltage difference is varied between the first connection elements to which the second connection elements are attached.

11. A connector assembly arranged to be coupled between a power supply and an electronic device, the power supply comprising two or more first connection elements in which some or all of the first connection elements are in series with different respective resistive loads and circuitry for maintaining the first connection elements at different voltages, the
5 connector assembly comprising
at least two second connection elements for connection to respective ones of the first connection elements of the power supply and electrically connectable to the electronic device, and
10 selection means for modifying the voltage difference between the first connection elements of the power supply to which the second connection elements are connected, whereby the connector assembly draws a selected voltage from the power supply and passes the selected voltage to the electronic device.
12. A connector assembly according to claim 11, wherein the power supply comprises more than two first connection elements and the selection means includes one or more auxiliary connection elements which are connectable to selected ones of the first connection elements of the
15 power supply to vary the voltage difference between the first connection elements of the power supply to which the second connection elements are attached.
13. A connector assembly according to claim 12, wherein the auxiliary
20 elements are electrically connected to each other.
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14. A connector assembly according to claim 13, wherein upon connection of the auxiliary connection elements to selected ones of the first connection elements, the voltage difference is varied between the first connection elements of the power supply to which the second connection elements are attached.
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15. A connector assembly according to any one of claims 11 to 14, wherein the second connection elements are electrically connectable to the electronic device via an electric cable.
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